| DQA: Date: | | | | DART | | | | | | | | | | | |
|---------------|------------|---|------------|---------------|----------|------------------------------|---------------------|------------------------|----------------------------|---------------------------------------|-------|---------------|---------------|---|---|
| | | | | | | WORK ORDER NON- | -CC | ONFO | RMANCE / U | UPDATE | | | | | AEROSPACE |
| QA Closed: | | | Date: | | | | | Work Order update only | | | | | | | |
| Work Orde | or. | | | | | DISPOSITION | | | AGAINST DEPARTMENT/PROCESS | | | | | | |
| Work Oral | | | | Rework | | | Skid-tube Crosstube | | | | | | Engineering | | |
| Part N | lo. | | | | | Scrap | | | Machining | Small Fab | ┪ | Pro | d. Eng. Coor. | | Quality |
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| NCR I | Ю. | | | | | Suspected Unapproved | | | Large Fab | Composite | | | Supplier | | |
| Root | | | | | Desc | ription of work order update | | nitial | Ι Δ | ction | Т | Sign & | | | |
| Cause | | Date | Step | Qty | 0000 | or non-conformance | l | ief Eng | ł | scription | | Date | Verification | า | QC Inspector |
| Design | | | | | | | | | | | 7 | | | | , |
| Doc/Data | | | | | | | | | | | | | | | |
| Equip/Tooling | | ! | | | | | | | | | | | | | |
| Handling/Pre | | | | | | | | | | | İ | | | | |
| Material | | | | | | | | | | | | | | | |
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| | | Cracks | | | _ | Broken/Damage/Defect | | Hardwa | | <u> </u> | - | Part Incorred | | | Temperature/Cure |
| | | Crimp/Kir | nk/Ripple | /Wave | | Burrs | ļ | 4 | ion Incomplete/ | · · · · · · · · · · · · · · · · · · · | - | Part Lost/Mi | ssing | | Weld |
| | _ | Cuffs | | | | Contamination | - | 4 | tions Incomplete | - | | Part Moved | į | | Wrong Stock Pulled |
| | <u> </u> | Crushing | | | | Countersink | | - | gned/off cente | r | _ | Positioned V | · · · | | l . |
| | Heat Treat | | _ | Cut Too Short | | Mislabe | | Į. | | Power Loss/ | Surge | | Other | | |
| | <u> </u> | Inspectio | • | Tube | <u> </u> | Drawing | _ | Misrea | | | | | | | |
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| | | | | | | WORK ORDER NON | -CC | ONFO | RMANCE / L | | | | _ | | AEROSPACE |
| QA Closed: | | | Date: | | | | | | | | Wor | k Order up | date only | | |
| Work Orde | er: | | | | | DISPOSITION | | | | AGAINST | DEP | ARTMENT | PROCESS | | |
| | • | | | | | Rework | 1 | | Skid-tube | Crosstube | | | Water Jet | | Engineering |
| Part N | No. | | | | | Scrap | | | Machining | Small Fab | _ | Pro | d. Eng. Coor. | | Quality |
| | • | | | | | Use-as-is | | Thern | noforming | Finishing | | Rec/Stor | e/Packaging | | Other |
| NCR I | No. | | | | | Suspected Unapproved | | | Large Fab | Composite | | | Supplier | | |
| Root | | | | | Desc | ription of work order update | ı | nitial | A | ction | Т | Sign & | | | |
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| | | Bending | | | <u> </u> | Bend | | 4 | Program | | _ | Outside Dim | | $\overline{}$ | Pressure/Forced |
| | <u> </u> | Centre No | ot Concer | ntric | <u> </u> | BOM/Route | <u> </u> | Grain | | | $\boldsymbol{\vdash}$ | Over/Under | | \dashv | Set-up |
| | | Cracks | | | | Broken/Damage/Defect | | Hardwa | | | | Part Incorred | | - | Temperature/Cure |
| | <u> </u> | Crimp/Kir | ık/Ripple | /Wave | | Burrs | <u>_</u> | 4 ' | ion Incomplete/ | - | _ | Part Lost/Mi | ssing | - | Weld |
| | <u> </u> | Cuffs | | | | Contamination | | 4 | tions Incomplete | | $\boldsymbol{\vdash}$ | Part Moved | L | | Wrong Stock Pulled |
| | <u> </u> | Crushing | | | | Countersink | <u></u> | -1 | gned/off center | r | - | Positioned V | | _ | l |
| | \vdash | Heat Trea | | | <u> </u> | Cut Too Short | | Mislabe | | | | Power Loss/ | Surge [| | Other |
| | <u> </u> | Inspection | | Tube | | Drawing | | Misread | | | _ | | | | |
| | \vdash | Marks/Ch | | | \vdash | Drill Holes | <u></u> | Off-set | | | _ | | | | |
| | | Turning S | | | <u> </u> | Finish | | - | Calibration | | _ | | | | |
| | 1 | Wave/Tw | ist in Tub | oe . | ļ | Fit/Function | | Out of | Sequence | | | | | | |

Work Order ID 112309 *112309* Page 3 January-30-14 11:30:42 AM **Item ID:** D3413-1 Accept *N900040100* Setup Start **Revision ID:** Stop **Item Name:** O-Ring **Start Date: Start Qty: 30.00** *30* 1/30/14 **Cust Item ID:** Required Date: 1/30/14 Req'd Qty: 30.00 *30* **Customer:** Reference: Run Start Process Plan: Date:_____ **Tooling: Approvals:** Date: Stop QC: Date:_____ SPC (Y/N): Date: Sequence ID/ Operation Reject Set Up/ **Tool ID** Tool # Plan Reject Accept Insp. Work Center ID Description Code DAS Number Stamp **Run Hours** Qty Qty 170 Identify as per dwg & Stock Location:_ 0.00 32 *170* 9-89 Packaging 0.00Memo Packaging

180

QC21- Final Inspection - Work Order Release

0.00

120

QC Quality Control

Memo

0.00

MUJ 14-04-US

14-04-07

| DQA: | | | Date: | | | | | | | | | | | • | DART |
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| | DA Closed: Date: | | | | | WORK ORDER NON | -CC | ONFO | RMANCE / L | JPDATE | | | <i></i> | | AEROSPACE |
| QA Closed: | | | Date: | | | | | | | | Wo | ork Order up | odate only | | |
| Work Orde | ar. | | | | | DISPOSITION | | | | AGAINST | DE | PARTMENT | /PROCESS | | |
| WOIK OIG | k Order: | | — | Rework | rk 🗆 📗 | | Skid-tube | Crosstube | Water Jet | | | | Engineering | | |
| Part N | lo. | | | | | Scrap | | | Machining | Small Fab | _ | Pro | d. Eng. Coor. | ᅥ | Quality |
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| NCR N | No. | | | | | Suspected Unapproved | 1 1 | | Large Fab | Composite | _ | | Supplier | \exists | |
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| Root | | | | | Desc | ription of work order update | ı | nitial | Ác | tion | | Sign & | | | |
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| Design | | | | | | | | | į Į | | | | | | |
| Doc/Data | | | | | | | | | | | | ļ | | | |
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| Handling/Pre | | | | | | | | | | | | | <u>.</u> | | |
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| Process | | | | | | | | | | | | | | | |
| Supplier Training | | | | | | | | | | | | | | | |
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| Unapproved | | | | | | | | | | • | | | | | |
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| Landi | ng (| Gear | | | | General | | | | 1 811111 | | | | | |
| | | Bending | | | | Bend | | Folio/F | Program | | | Outside Dim | ensions | | Pressure/Forced |
| | | Centre No | ot Concer | ntric | | BOM/Route | | Grain | | | | Over/Under | tolerance | | Set-up |
| | | Cracks | | | | Broken/Damage/Defect | | Hardwa | are | | | Part Incorre | cí [| | Temperature/Cure |
| | | Crimp/Kir | nk/Ripple | /Wave | | Burrs | | Inspect | ion Incomplete/l | Jnqualified | | Part Lost/M | issing | | Weld |
|] | | Cuffs | | | | Contamination | | - | tions Incomplete, | | | Part Moved | L | | Wrong Stock Pulled |
| | _ | Crushing | | | | Countersink | L | ٠ - | gned/off center | | | Positioned V | · · | | |
| | Heat Treat | | | Cut Too Short | \vdash | Mislabe | | | <u> </u> | Power Loss/ | Surge | | Other | | |
| | | Inspectio | - | Tube | <u> </u> | Drawing | <u></u> | Misrea | | | | | . , | | ···· |
| | _ | Marks/Ch | | | L | Drill Holes | | Off-set | | | | | | | |
| | <u> </u> | Turning S | | | L | Finish | \vdash | 4 | Calibration | | | | | | |
| 1 | ì | Wave/Tw | ist in Tub | oe | | Fit/Function | 1 | Out of: | Sequence | | | | | | |

January-30-14 11:30:41 AM

Work Order ID:

112309

Parent Item:

Comments:

D3413-1

Parent Item Name:

O-Ring

O-King

IPP Rev:A05.09.13New issueKJ/JLM

IPP Rev:B Now on Waterjet 07-05-28 JLM

Start Date: 1/30/14

Required Date: 1/30/14

Start Qty: 30.00

Required Qty: 30.00

| Component Item ID/ Item Name | Replacement Item ID | Mfg/ Purch | Bin Item | Primary Location | Last Location | Route Seq ID | Unit of Measure | Qty on Hand | Qty per Kit | Total Qty | Qty Issued | Date Issued | Status |
|--|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|------------------------|---------------|----------------|--------|
| M304B0.250X4.000 304 BAR .250 x 4.00 | | Purchased | No | ; | | 100 | f | 11.5000 | 0.25 | 7.894737 <i>E</i> Z | mm | 14/ | 04/03 |

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| DQA: | | | Date: | | | | | TAART | | | | | | | | |
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| | | Date: | | | | WORK ORDER NON- | -CC | ONFO | RMANCE / UPDATE | | | | AEROSPACE | | | |
| QA Closed: | | | Date: | | | | | | | W | ork Order up | date only | | | | |
| Work Orde | er: | | | | | DISPOSITION | | | AGAINST DEPARTMENT/PROCESS | | | | | | | |
| | • | | | | | Rework | | | Skid-tube Crosstube | | 1 | Water Jet | Engineering | | | |
| Part N | lo. | | | | | Scrap | | ĺ | Machining Small Fab | | Pro | d. Eng. Coor. | Quality | | | |
| | • | | | | | Use-as-is | | Thern | noforming Finishing | | Rec/Sto | re/Packaging | Other | | | |
| NCR N | ۱o. ِ | | | | | Suspected Unapproved | | | Large Fab Composite | |] | Supplier | | | | |
| Root | | | | | Desci | ription of work order update | ı | nitial | Action | | Sign & | | | | | |
| Cause | | Date | Step | Qty | | or non-conformance | Ch | ief Eng | Description | | Date | Verification | QC Inspector | | | |
| Design | | | | | | | | | | | | | | | | |
| Doc/Data | | | | | | | | | | | | | | | | |
| Equip/Tooling | | | | | | | | | | | | | | | | |
| Handling/Pre | | i | | | | | | | | | | | | | | |
| Material | | | | | | | | | | | | | | | | |
| Operator | | | | | | | | | | | | | | | | |
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| Process | | | | | | | | | | | | | | | | |
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| Transport | | | | | | | | | | | | | | | | |
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| Landi | ng (| 1 | | | | General | _ | 1 | | | ٦ . | _ | - | | | |
| | | Bending | | | <u> </u> | Bend | <u> </u> | 4 | Program | \vdash | Outside Dim | <u> </u> | Pressure/Forced | | | |
| | | Centre No | ot Concer | ntric | | BOM/Route | _ | Grain | | L | Over/Under | | Set-up | | | |
| | | Cracks | | | | Broken/Damage/Defect | _ | Hardwa | | _ | Part Incorre | - | Temperature/Cure | | | |
| | _ | Crimp/Kir | nk/Ripple | /Wave | | Burrs | _ | 1 | ion Incomplete/Unqualified | | Part Lost/Mi | _ | Weld | | | |
| | <u> </u> | Cuffs | | | <u> </u> | Contamination | - | 4 | tions Incomplete/Unclear | L | Part Moved | | Wrong Stock Pulled | | | |
| | <u> </u> | Crushing | | | | Countersink | - | • | gned/off center | <u></u> | Positioned V | | ¬ . | | | |
| | _ | Heat Trea | | | <u> </u> | Cut Too Short | <u></u> | Mislabe | | L | Power Loss/ | Surge | Other | | | |
| | | Inspection | - | Tube | <u> </u> | Drawing | <u>_</u> | Misrea | | | | | | | | |
| | <u> </u> | Marks/Ch | | | <u> </u> | Drill Holes | L | Off-set | | | | | | | | |
| | <u> </u> | Turning S | | | <u> </u> | Finish | <u></u> | 4 | Calibration | | | | | | | |
| | <u> </u> | Wave/Tw | ist in Tub | oe | | Fit/Function | | Out of | Sequence | | | | | | | |

| DART AEROSPACE LTD | Work Order: | 112309 |
|------------------------------|--------------|-------------|
| Description: Ring | Part Number: | D3413-1 |
| Inspection Dwg: D3413 Rev: A | | Page 1 of 1 |

FIRST ARTICLE INSPECTION CHECKLIST

X First Article X Prototype

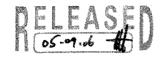
| Drawing Dimension | Tolerance | Actual Dimension | Accept | Reject | Method of Inspection | Comments |
|----------------------|---------------|---------------------|--------|--------|-------------------------|----------|
| 3.88 | +/-0.030 | 3.87 | | | | |
| Ø2.00 | +0.012/-0.001 | 1.99 | V | | | |
| 0.75 | +/-0.030 | | V | | | |
| Ø0.266 | +0.006/-0.001 | 0.75 | 67. | | | |
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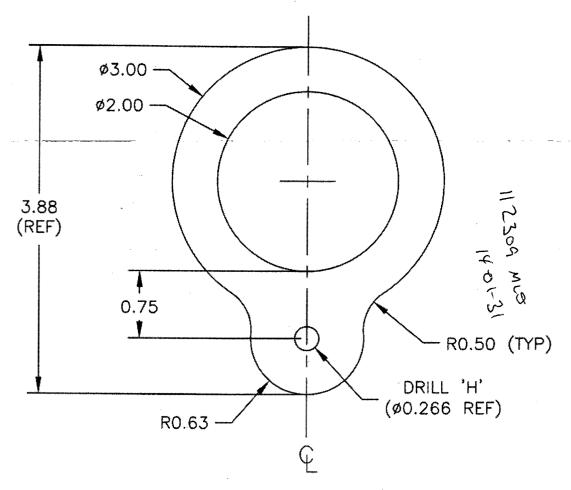
| Measured by: mm / 2 | Audited by: | 27 / 9-69 | Prototype Approval: | N/A |
|---------------------|-------------|--------------|---------------------|-----|
| Date: 14/04/03 | Date: | MAII | Date: | N/A |

| Rev | Date | Change | Revised by, | Approved |
|-----|----------|-----------|-------------|----------|
| Α | 07.09.06 | New Issue | KJ/JLM O | E |
| | | | | |



| DESIGN | OP CP | DART | AEROSPACE USA, INC. |
|-------------|------------|-------------|-------------------------|
| CHECKED *** | APPROVED A | DRAWING NO. | REV. A SHEET 1, OF 1 |
| DATE | | TITLE | SCALE |
| 05.03.1 | 6 | RING | <u> </u> |
| A | 05.03.16 | NEW ISSU | ĴE . |





D3413-1 RING

- telepit dell'addition del Mangelle del Lancier

- 1) MATERIAL: AISI 304/316 SS PLATE, 0.250 THICK (REF DART SPEC. M304S3GA)
- 2) FINISH: POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
- 3) DEBURR ALL SHARP EDGES 0.010 TO 0.020
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES

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The Company of the Co